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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,941	11/25/2003	Franklin G. Ascarrunz	DN 1539	6897
26483 75	590 02/09/2005		EXAMINER	
ANCEL W. LEWIS, JR.			CHOE, HENRY	
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SUITE 101			ART UNIT	PAPER NUMBER
FORT COLLIN	NS, CO 80521		2817	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	<u></u>		$\mathcal{M}$
	Application No.	Applicant(s)	
	10/721,941	ASCARRUNZ ET AL.	
Office Action Summary	Examiner	Art Unit	
	Henry K. Choe	2817	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address	S
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be to y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from to, cause the application to become ABANDON	imely filed  ys will be considered timely.  n the mailing date of this commun  ED (35 U.S.C. § 133).	ication.
Status			
1)⊠ Responsive to communication(s) filed on 25 N	lovember 2003.		
, , , , , , , , , , , , , , , , , , , ,	action is non-final.		
3) Since this application is in condition for alloware closed in accordance with the practice under E	nce except for formal matters, pi		its is
Disposition of Claims			
4) ☐ Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) 10-12 is/are allowed. 6) ☐ Claim(s) 1,13 and 14 is/are rejected. 7) ☐ Claim(s) - 9 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.	·	
9)☐ The specification is objected to by the Examine	er.		
10) ☐ The drawing(s) filed on 25 November 2003 is/a  Applicant may not request that any objection to the  Replacement drawing sheet(s) including the correct  11) ☐ The oath or declaration is objected to by the Ex	drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.1	121(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No /ed in this National Stag	e
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview Summar	v (PTO-413\	
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 11/25/2003.</li> </ul>	Paper No(s)/Mail [		

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sakai (Fig. 1).

Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13, 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (Fig. 1) in view of Sakai (Fig. 1).

Wilcox (Fig. 1) discloses an amplifier circuit comprising a resonator (13), a phase modulator (11) which is connected to the resonator (13), and an amplifier circuit (10) which is connected to the resonator (13) and the phase modulator (11). As described above, Wilcox (Fig. 1) discloses all the limitations in the claim 13 except for that the internal structures of the amplifier circuit. Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13. 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19). It would have been obvious to substitute Sakai's amplifier in place of Wilcox's amplifier (10 of Wilcox) since Wilcox (Fig. 1) Art Unit: 2817

discloses a generic amplifier thereby suggesting that any equivalent amplifier would have been usable in Wilcox's reference.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi (Fig. 1) in view of Sakai (Fig. 1).

Higuchi (Fig. 1) discloses an amplifier circuit comprising first (11) and second (111) amplifier circuits, and a frequency mixer (13) which is connected to the first (11) and second (111) amplifier circuits. As described above, Higuchi (Fig. 1) discloses all the limitations in the claim 14 except for that the internal structures of the amplifier circuits. Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13, 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19). It would have been obvious to substitute Sakai's amplifier in place of Higuchi's amplifiers (11 and 111 of Higuchi) since Higuchi (Fig. 1) discloses a generic amplifiers thereby suggesting that any equivalent amplifiers would have been usable in Higuchi's reference.

## Allowable Subject Matter

Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Reasons for Allowance

Claims 10-12 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 10, the closest prior art of record, Sakai (Fig. 1) does not disclose the following limitations: a third circuit having a sixth modulator with the variable delay and variable attenuator.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent numbers (6,172,560; 6,456,160) are the feedforward amplifiers.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (571) 272-

1760.

HENRY CHOE
PRIMARY EXAMINER

#977